more distinctly barred dark brown and white. Full grown young of the year dark brown, but not so nearly black as adults.

Types, ♂ ad. Collector's No. 4123, Dec. 27, 1886; ♀ ad. Collector's No. 4127, Jan. 8, 1887.

Habitat: West Coast of Florida.

Types in American Museum of Natural History, New York. Collected by W. E. D. Scott, Tarpon Springs, Fla. Immature birds in National Museum, Washington, taken at Charlotte Harbor, Florida.

I had intended for this number of 'The Auk,' in connection with this short description of the new form, a paper on the entire group of large Rails. Although I have had large series at my command for study, yet the promise of still many more from various localities, leads me to defer the article for a future number, when it can be more satisfactory.

RECENT LITERATURE.

Palmén's Contributions to the Knowledge of the Bird Fauna of the Siberian Coasts of the Arctic Sea.*—The celebrated author of the 'Zugstrassen der Vögel' has given us in the work before us one of the most important and comprehensive, not to say *the* most important and comprehensive treatise on Arctic birds ever written. The public has been impatiently awaiting the publication of the ornithological results of Nordenskiöld's famous expedition (1878–1879), and though long delayed, it is nevertheless highly welcome to the students of northern ornithology.

The working up of the material could not have fallen into better hands, and we are thankful that the author has not only treated of the species collected, but that he also included those found by others, and particularly that he has given us a special chapter on the distribution of the species within the entire Arctic province, accompanied by a comprehensive bibliography.

Hitherto we have had no exact knowledge of the birds occurring along the Arctic coasts of Siberia, except a few scattered notes as to the birds inhabiting the extreme west or the extreme east of the territory, and Mid-

* Bidrag | till kännedomen om | Sibiriska Ishafskustens fogelfauna | enligt | Vega-expeditionens | iakttagelser och samlingar | bearbetade | af | J. A. Palmén. < Vega-Exped. Vetensk. | Iakttag, V, pp. 241–511. (Stockholm, 1887).

dendorff's observations in the Taimur Peninsula. We know that the Atlanto-glacial forms must meet their Pacifico-glacial neighbors somewhere on the coast in question, but just where we could only guess at. Palmén's eight tables (appended between pp. 500 and 501) are here of the greatest importance.

But it would carry us too far were I to give a resumé of all that is interesting in his book. I shall only mention that it is divided into four parts, the first of which treats of the localities in which the observations were made, and their physiographical character. The second, comprising the bulk of the memoir, contains the observations, localities, technicalities, etc., arranged under the head of each species, eighty of which are numbered as collected by the 'Vega' Expedition. The third part is devoted to the changes in the bird life on the northern coast of the Tschuktschi Peninsula during 1879, while the fourth treats of the distribution of the species over the entire Arctic province together with a synopsis of the literature. Finally (pp. 501-511) there are some general remarks, with tables, relating to the composition of the avifauna of the Tschuktschi Peninsula.

Want of time and space prevents me from going into detail, and when, in the following, I attempt to make a few desultory remarks, it is because they may be regarded as answers to questions raised by Palmén in his paper, to which I might be regarded as the proper respondent.

Palmén's doubt (p. 272, footnote) in regard to the statement made by Nelson (Cruise of the Corwin, 1881, p. 62) that Mr. Dall obtained a specimen of *Anthus pratensis* at St. Michael's, Alaska, is fully justified, as the specimen in question really is an *A. cervinus*. The former species has not been found in Alaska.

The remarks by Prof. Palmén in regard to the correctness of referring the East Asiatic Dunlins to the American form *Tringa alpina pacifica* has led me again to look into the question, and I can but state that after having carefully gone over the immense series of the U. S. National Museum, which has been considerably increased since I identified my Kamtschatkan specimens four years ago, I am still upholding that determination as correct. Palmén pays almost exclusive attention to the size of the two alleged forms, but it is quite plain that in birds of such variability of size as shown by the Dunlin this character can only be one of secondary consideration. The West-palæarctic form, *T. alpina typica*, differs clearly in coloration from the bird inhabiting both sides of the Pacific.

The latter is brighter above, and usually more red; the white on face and neck is purer, the black streaks and spots smaller, and the black patch on the belly purer and better defined. But there is also an *average* difference in size between the two forms, for in the American subspecies the wing varies between 111 and 126 mm. and the exposed culmen between 35 and 45 mm. while the corresponding range in the typical form seems to be 109 to 117 mm. and 27 to 35 mm. With the exception of one specimen (No 89,180) the Bering Island birds come within the former limits, and in coloration they agree minutely with the brightest American skins. In

addition I may quote a pair of Japanese birds recently received. As to color they are typical *T. pacifica*, while the measurements run as follows:

U. S. Nat. Museum No.	Collector.	Sex and age.	Locality.	Date.	Wing.	Tail-f.	Exp. Culmen.	Tarsus.	Middle toe with claw.
109,427	Namiye	♂ ad.	Shimosa, Hondo, Japan	Apr. 22, 1883	121	54	39	28	...
109,426	do	♀ ad.	" " "	June 2, 1886	118	51	40	27	24

These are undoubtedly the same as the American birds. It is also well to bear in mind that Dr. Coues's type of *T. pacifica* (U. S. Nat. Mus. No. 9540) is the largest specimen in our immense series, viz., wing, 126 mm.; tail-feathers, 59 mm.; exposed culmen, 44 mm.; tarsus, 28 mm.; middle toe, with claw, 25 mm.

Palmén is quite right in supposing (p. 319, footnote) that the so-called *Tringa minutilla* collected by Dr. T. Bean* in Plover Bay, August 13, 1880, was erroneously identified, but he is wrong in supposing it to belong to *T. temminckii*, with which it could never be confounded, as the latter has a simply graduated tail with the outer tail-feathers pure white, and only the first primary with a white shaft, while the specimen in question has a doubly excised tail, gray outer rectrices, and white on the shafts of all the primaries. It is a young bird which in its general coloration and in most of its characters agrees closely with *T. minutilla*, but a close comparison with specimens of the latter in corresponding plumage shows that Bean's specimen is different. Point for point, however, it agrees minutely with a young *T. ruficollis* which I myself collected on Bering Island (U. S. Nat. Mus., No. 92,796), and to this species the specimen in question undoubtedly belongs. As already stated, young *T. minutilla* and *ruficollis* are very much alike, but the latter may be distinguished by longer wings, stouter and *comparatively* shorter bill, more white on the shafts of the primaries and broader white edges to the inner (proximal) primary quills, grayish rump with lighter edges to the feathers, instead of the nearly solid black rump of the other species, generally lighter upper surface, more grayish sides of head and neck, and uniform grayish chest which in *T. minutilla* usually is more streaked with dusky. Bean's specimen (U. S. Nat. Mus., No. 81,413) measures as follows: wing, 97 mm.; tail-feathers, 45 mm.; middle toe with claw, 17 mm.; exposed culmen, 15.5 mm.

Very interesting is the demonstration (pp. 343-346) of the occurrence of *Charadrius dominicus*, the American Golden Plover, on the Tschuktschi Peninsula, which goes to show that the ranges of the two races cross each other in the region bordering the northern part of Bering Sea, the

*Proc. U. S. Nat. Mus., V, 1882, p. 164. By a curious mistake Palmén quotes this specimen as collected by Mr. Dall, and throughout the book he refers to Dr. Bean's observations in the paper quoted as made by Dall (*e.g.* pp. 491, 492, 494, etc.). In the first sentence of the paper Dr. Bean distinctly states that "the collection ..... was made by the writer [Bean]."

Asiatic form, *Ch. d. fulvus*, migrating into northwestern Alaska to breed, and the American form crossing Bering's Strait into Asia. Mr. Ridgway and I have examined immense series of these birds from the regions in question apropos of his 'Water Birds of North America' and 'Manual of North American Birds,' as well as my 'Ornithological Explorations in Kamtschatka' and my various papers on Japanese and Hawaiian ornithology; and from the fact that we found no *Ch. fulvus* among the numerous Golden Plovers collected during the migrating season in more southern latitudes in America, and no *Ch. dominicus* among the Asiatic or Australian specimens, we concluded that all *Ch. dominicus* migrate south along the American coasts, and all *Ch. fulvus*, whether bred in Alaska or not, along the Asiatic shores. I am inclined to conclude that the Tschuktschi individuals of *Ch. dominicus* also retrace their steps across Bering's Strait and join their American confrères in going South, for, even if there were no further evidence, it seems probable that were the small Tschuktschi colony of the American form to travel along the migrating routes of *Ch. fulvus* they would soon be utterly absorbed by the latter. I do not believe that two *races* (and Palmén admits that they are only races, p. 346) can migrate along the same route without their becoming entirely assimilated. Of course, single individuals, or even small detached flocks, of one race may be led by some accident to follow the route of the other race, especially in a case like the present where the apparent routes cross each other, but these individuals prove nothing as to the *regular* route of the race, so that even if isolated specimens of *Ch. dominicus* should be found occasionally in southern latitudes of Eastern Asia, such occurrence would be no valid argument against the generalization made by me (Results Orn. Expl. Kamtsch., p. 105), in fact, they are to be *expected*, and it would be strange indeed did they not occasionally occur. Prof. Palmén, however, takes exception to my conclusion, simply because Swinhoe in former days recorded the capture of both *Ch. fulvus* and *dominicus* (*virginicus*, as he called it) in China and Japan, and he thinks it unsafe to generalize before all Swinhoe's examples have been re-examined. Now, in the first place, it is pretty safe to say that Swinhoe at that time had not grasped the true differences between the two forms; in the second place,

U. S. Nat. Museum No.	Collector.	Sex.	Locality.	Date.	Wing.	Tarsus.
					mm.	mm.
107,067	Swinhoe	♀	Canton, China	April 30, 1860	166	44
107,066	"	....	Amoy, "	Sept., 1866	161	42
107,104	"	....	" "	Oct. 15, 1866	160	42
107,103	"	....	" "	Oct. 15, 1866	168	43
107,068	"	....	" "	Sept., 1867	154	41
37,757	"	....	" "	 1867	163	45
107,107	"	....	Hainan, "	April, 1868	164	44
107,108	Blakiston, 1644	♀	S. Yezo, Japan	July 14, 1874	161	43

Mr. Seebohm, the present owner of the Swinhoe collection has expressly declared that *Ch. virginicus* "has not yet been found in Asia"; in the

third place, I have before me seven specimens collected by Swinhoe in China and one from Japan determined by him; these are all true *Ch. fulvus* as will be seen from the accompanying measurements, but the conclusive part of it is that the first and the last specimens of the series measured are determined by Swinhoe as *Ch. virginicus*, this name being written on the labels in his own handwriting, while the others are named *Ch. fulvus*.

I may finally mention that one of the stray migrants of *Ch. dominicus* to be expected on the route of *Ch. fulvus* seems to have been captured by the 'Vettor Pisani' party in Olga Bay, Gulf of Tartary, September, 1879 (Giglioli and Salvadori, P. Z. S., 1887, p. 585; publ. 1888). The wing of this specimen measured 180 mm., and consequently is considerably larger than the average *Ch. fulvus* but there is a probability that some of the large specimens of East-Asiatic Golden Plovers may not be pure-bred, as interbreeding between the two so closely allied forms is almost certain to take place where their ranges meet.

In regard to the *Grus* mentioned on p. 348 as having been taken "to the north of Jakutsk," on Mr. Taczanowski's authority, I may remark that the latter gentlemen has afterwards specified the locality as being "Cap Tschukotsk" (Bull. Soc. Zool. France, 1876, p. 246) whence came also the specimens of *Turdus aliciæ* and *Macrorampkus* quoted by him (*l. c.* pp. 148, 255).

I am pleased to see that Prof. Palmén has arrived quite independently at the same results in regard to *Rissa pollicaris* as myself. The North Pacific Kittiwake is certainly more distinct than has formerly been supposed, and there is no good reason for including the true *R. tridactyla* among the birds of that region.

On page 370 Prof. Palmén describes a new subspecies of the Herring Gull as *Larus argentatus* var. *vegæ*, "characterized by a particularly dark gull-gray mantle and flesh-colored legs," from the countries bordering on Bering Sea and adjacent waters. There is no doubt in my mind that this is the bird which North American ornithologists (including A. O. U. Check List) call *Larus cachinnans* "Pallas," and I have always had a suspicion that the color of the feet of this bird as given in North American publications was erroneous, it being in most cases stated to be yellow, and my suspicion has been confirmed by the fact that Mr. P. L. Jouy in his ms. catalogue gives the color of feet of two specimens from Japan (Jouy, Nos. 1030, 1031) otherwise indistinguishable from *L. cachinnans* Auct. Amer. as "very pale flesh color." The Mediterranean bird, on the other hand, is known to have yellow feet, and as Pallas describes his *L. cachinnans* as having "pedes pallide flavescentes" (Zoogr. Ross. As., II, p. 319), with the principal habitat "Mare Caspium," while he does not mention it as occurring in the Pacific, it seems as if Palmén were right in giving the form from the North Pacific a new name. I am not prepared, however, to accept as yet a trinominal appellation, as the true status and relationship of the present Gull are not well established, and propose to recognize it as *Larus vegæ* (Palmén).

Had Palmén consulted my 'Remarks on the species of the Genus *Cep-*

phus' (Proc. U. S. Nat. Mus., VII. 1884, pp. 210-229) he would have found all the doubts expressed by him on pp. 390-391 in regard to the distribution of *Cepphus mandtii* in the Pacifico-glacial waters cleared up, and he would not have urged a reopening of the question.

Whether *Anser gambeli* really differs *sufficiently* to be recognized as a separate race of *A. albifrons*, is to my mind rather doubtful, as the Old World material at my command is very scanty, and I am afraid that the Old World ornithologists are in about the same difficulty with respect to *A. gambeli*. However, Mr. Ridgway and I, going over our material conjointly, found that the length of the exposed culmen in typical *A. albifrons* varies between 40 and 45 mm., while in *A. gambeli* the range is between 46 and 60 mm. The 'Vega' expedition skin with a bill of 47 mm. consequently falls within the limits of *A. gambeli*, and confirms my conjecture that all the birds of the Asiatic Pacific coast belong to this form.

Palmén, on p. 442, charges that authors have overlooked Kittlitz's statement in regard to the supposed occurrence of *Philacte canagica* (*Anser pictus* Pall.) in Kamtschatka, but on p. 318 of my 'Results, etc.,' he will find that I have referred to Kittlitz's bird, and identified it as probably belonging to *Branta hutchinsii*, a reference which is no doubt entirely correct.—L. Stejneger.

A Catalogue of the Birds of North Carolina.*—The author is induced to present this work in its "present imperfect form" in "the hope that the publication now of the records of the work, so far as it has progressed, may stimulate a desire in resident North Carolinians in different parts of the State to collect material and record observations of the birds to be found within our State limits." Two hundred and fifty-five "species and subspecies" are enumerated, of which "about 120 species have been observed and absolutely identified" by the author, who acknowledges his indebtedness, for notes on the occurrence of the major portion of the remaining one hundred and thirty-five, to Charles F. Batchelder, William Brewster, H. H. and C. S. Brimley, and John S. Cairnes, but has evidently overlooked Coues's 'Birds observed at Fort Macon, N. C.'† and also Sennett's 'Observations in Western North Carolina Mountains in 1886.'‡ which contain twenty species not included in the present 'Catalogue,' while a re-examination of Cairnes's list will add one more. Being largely based on the printed works of the authors mentioned, it contains comparatively little original matter requiring comment, but notices of the capture of *Chen cærulescens* ("taken on Bogue Beach, one mile from Fort Macon in spring of 1884") and *Spizella pallida* ("Chapel Hill, March 8, 1886") are apparently here recorded for the first time. An appendix,

* Preliminary Catalogue of the Birds of North Carolina, with notes on some of the species. [By] George F. Atkinson. Contributed from the Biological Laboratory of the Univ. of N. C., No. VI. Journal of Elisha Mitchell Scientific Society, 1887, Part 2.

† Proc. Acad. Nat. Sci. Phila., 1871, pp. 18 47; 1878, pp. 22–24.

‡ Auk, Vol. IV., July, 1887, pp. 240–245.